

and should assert jurisdiction over CPP notification practices and should preempt States from imposing inconsistent or additional notification requirements.

V. THE COMMISSION SHOULD PROVIDE CARRIERS WITH THE MEANS TO ENSURE BINDING OBLIGATIONS WITH THE CALLING PARTY.

As the Notice suggests,⁴⁹ it is important to ensure at the outset that any agreements reached between a CMRS provider and a calling party under CPP create binding obligations on both parties. Such considerations are especially crucial in the CPP environment as CMRS carriers will likely have no pre-existing relationship with the calling party. In this regard, it may be useful for the Commission to establish guidelines for CMRS carriers choosing to offer CPP so that they may avail themselves of the traditional common carrier limited immunities from liability as well as the means to secure the enforceability of CPP charges. By adopting one or all of the alternatives discussed below, the Commission would ensure the existence and availability of a federally sanctioned means to solidify the CMRS provider/CPP calling party relationship.

Title II, specifically Sections 201 and 202,⁵⁰ as the cornerstones of communications common carrier regulation, establish a set of complex relationships between carriers, consumers, and government which are reflective of common law common carrier principles. Section 201 imposes upon carriers the

⁴⁹ Notice at ¶ 21.

⁵⁰ 47 U.S.C. §§ 201, 202.

duty to deal, to interconnect, and to provide just and reasonable charges for common carriage services rendered.⁵¹ Similarly, Section 202 prohibits unjust or unreasonable discrimination in common carrier charges or services. In exchange for the imposition of these public service charges, and based upon the realization that unlimited tort liability would render carriers impotent, communications common carriers have historically operated with limited liability for transmission services.⁵² In addition, a common carrier's public disclosure of the key provisions of a service offering creates a consumer obligation to pay⁵³ -- assuming such provisions are reasonable and

⁵¹ Similar requirements have been imposed upon carriers since the inception of common carriage. See Michael K. Kellogg et al., Federal Telecommunications Law § 1.3.1, at 12 (1992); See Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor, CC Docket No. 79-252, Further Notice of Proposed Rulemaking, 84 FCC 2d 445, Appendix B at ¶ 2 (1981) ("Competitive Carrier").

⁵² See Michael K. Kellogg, et al., Federal Telecommunications Law § 1.3.1 at 12-13 (1992) (carriers who charged only "'reasonable and nondiscriminatory' rates, provide[d] adequate service, and accept[ed] all customers on the same terms, without discrimination," were granted "important legal privileges, most particularly limits on their liabilities"); see also Primrose v. Western Union Telegraph Co., 154 U.S. 1 (1894) (as cited in Competitive Carrier Appendix B at ¶ 38 ("The Court went on to discuss the common law policy of insurer's [or strict] liability . . . and concluded that such [strict] liability should not apply to telegraphs. Telegraph messages were peculiarly susceptible to mistakes. . . . Thus, telegraph companies were not common carriers for purposes of [strict] liability, but were analogous to common carriers in having the same duties to serve all upon reasonable terms."))

⁵³ See, e.g., Dial-Around Reconsideration Order, at ¶ 28 ("providing the rates, terms, and conditions prior to completion of the [dial-around 1+] call would establish an enforceable contract. . .").

nondiscriminatory -- thus allowing for enforceability of charges.⁵⁴

Tariffs are the traditional method of providing consumers with notice of a carrier's limited liability as well as the provisions of a service offering. Of course, as a result of the Commission's action to forbear from unnecessary Title II common carrier obligations, including Section 203,⁵⁵ CMRS providers do not currently file any tariffs with the Commission.⁵⁶ A limited reconsideration of such previous forbearance action for the sole purpose of posting CPP data may be warranted in this instance.

In the CPP environment, the Commission may consider several notification possibilities which should serve the dual functions of (1) identifying for the Commission and consumers the key provisions of their service offerings to ensure an enforceable arrangement; and (2) notifying consumers of the CMRS providers' traditional common carrier limited liability:

- Revisit in part its decision to forbear from Section 203 and permit CMRS providers offering CPP to file informational CPP tariffs, similar to those filed by 1+ dial-around services;

⁵⁴ As the Commission notes, the obligation to pay can also arise under the "implied-in-fact contract theory" or the common law principle of quantum meruit. *Id.* at ¶¶ 28, 34.

⁵⁵ 47 U.S.C. § 203.

⁵⁶ See Implementation of Sections 3(n) and 332 of the Communications Act; Regulatory Treatment of Mobile Services, GN Docket 93-252, *Second Report and Order*, 9 FCC Rcd 1411 (1994). In this order, the Commission also forbore from applying the contract filing requirements in Section 211, 47 U.S.C. § 211 ("CMRS Forbearance Order").

- Revisit in part its decision to forbear from Section 211 and permit CMRS providers offering CPP to file model informational contracts pursuant to Section 211 which would be made available by the Commission to the public; or
- Permit CMRS providers offering CPP to file special CPP service reports pursuant to Section 219 which would be made available by the Commission to the public for inspection.

An informational tariff filing under Section 203 with respect to CPP services presents several possible benefits which may outweigh the significant costs generally associated with tariff filing requirements. Similar to tariff filings of non-dominant interexchange carriers, including 1+ dial-around services, CPP tariffs should not be subject to prior Commission approval or review, should be presumed to be lawful, and should not require the filing of any supporting cost support data.⁵⁷

As noted above, CMRS carriers will likely have no pre-existing relationship with the calling party -- similar to the current situation with long distance 1+ dial-around carriers. Therefore, it becomes crucial to establish an enforceable relationship with calling customers by notifying them of key terms, including rates and limited liability.⁵⁸

⁵⁷ See Policy and Rules Concerning the Interstate Interexchange Marketplace Implementation of Section 254(g) of the Communications Act of 1934, as amended, Second Report and Order, CC Docket No. 96-61, 11 FCC Rcd 20730, n.29 (1996). CTIA would not support any CPP tariff filing obligations which would require cost justification by CMRS carriers, or would burden the Commission with prior approval requirements.

⁵⁸ It is important that the notification be meaningfully complete. Hence, the methods described in this section are

In the context of interstate, interexchange 1+ dial-around services, carriers were faced with directly analogous circumstances to CPP in that the charged party did not necessarily have a pre-existing relationship with the billing carrier. The Commission permitted permissive tariffing by dial-around carriers and:

modified its rules to give carriers the option of filing tariffs for dial-around 1+ services (interstate, domestic, interexchange direct-dial services to which consumers obtain access by dialing a carrier's access code) because long distance carriers cannot reasonably establish enforceable contracts with causal callers in these circumstances.⁵⁹

Such limited permissive tariffing action may be warranted here to ensure the same standards of enforceability for CMRS providers.

As an alternative to tariff filings, the Commission may reconsider in part its decision to forbear from applying Section 211 and permit CMRS providers to voluntarily file model CPP contracts which would be made available for public inspection. Such 211 contracts would serve to notify consumers of key service

preferable to an attempt to include such extensive information in a disclosure message.

⁵⁹ See Federal Communications News Release, "Commission Affirms With Minor Modifications Decision to Eliminate Tariff Filing Requirements for Long Distance Carriers," Report No. CC 97-46 (rel. Aug. 20, 1997); see also Dial-Around Reconsideration Order. As noted in the Dial-Around Reconsideration Order, the Commission's rules promulgated in this proceeding have been stayed by the D.C. Circuit and the Commission so that the court may review the Commission's policy of complete detariffing. See Dial-Around Reconsideration Order, at ¶ 4. Similar concerns are not present in the CMRS context as the Commission has a separate, express basis for forbearance from CMRS tariff filing requirements. 47 U.S.C. § 332(c)(1)(A).

provisions such as rates and preserve CMRS providers' limited liability common carrier status.

Section 211(b) can be interpreted by the Commission to offer CMRS providers an alternative to tariff filings by allowing the Commission to require the submission of "any other contracts of any carrier."⁶⁰ The FCC has interpreted this statutory provision broadly, stating that "carriers and non-carrier customers can enter into contracts, agreements, and arrangements, and under Section 211 of the Act, 47 U.S.C. § 211, the Commission can require these documents to be filed when it deems necessary."⁶¹ This reading of Section 211(b) certainly allows CMRS providers the opportunity to file informational contracts which can then be made available to the public for inspection.

Forbearance from Section 211 initially may have appeared justifiable to the Commission several years ago; however, CPP presents new circumstances which suggest that Section 211 may be valuable to the Commission and to consumers in this limited respect. In deciding to exempt CMRS providers from Section 211, the FCC's rationale, in part, was "that consumers will not be harmed if we forbear from the contract filing provisions of Section 211. Competitive market forces will ensure that inter-carrier contracts will not be used to harm consumers."⁶² Rather

⁶⁰ 47 U.S.C. § 211(b).

⁶¹ See Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor, CC Docket No. 79-252, *Sixth Report and Order*, 99 FCC 2d 1020 at ¶ 12 (1985).

⁶² See CMRS Forbearance Order at ¶ 181.

than filing contracts, the FCC suggested individual, case-by-case Section 208 complaints to resolve disputes. However, with respect to CPP, rates are an integral term which must be known by the consumer in order to ensure the enforceability of CPP charges. Moreover, an ad hoc, individualized complaint process would be excessively burdensome to consumers, carriers, and the Commission. Permitting CMRS carriers to file informational CPP contracts under Section 211(b) should inform consumers of CPP rates and prevent costly ad hoc complaint resolution.

Finally, the Commission's express authority under Section 219 to permit carriers to file special and other reports may provide an additional basis to ensure enforceable CPP contracts. Specifically, Section 219(a) grants the Commission significant discretion to have carriers file reports containing "information in relation to charges or regulations concerning charges, or agreements, arrangements, or contracts affecting the same, as the Commission may require."⁶³ Moreover, Section 219(b) grants the Commission authority by general or special order to have CMRS carriers providing CPP to file "periodical and/or special reports concerning any matters with respect to which the Commission is authorized or required by law to act."⁶⁴ These congressional grants of authority can be interpreted broadly by the Commission to permit the filing of annual (or periodical) CPP service reports which, once publicly available, would disclose to

⁶³ 47 U.S.C. § 219(a).

⁶⁴ 47 U.S.C. § 219(b).

potential CPP calling parties the key provisions and relevant limitations on the CMRS carrier's liability.

VI. CONCLUSION

CTIA respectfully requests that the Commission quickly adopt rules governing CPP services consistent with the proposal detailed in these Comments.

Respectfully submitted,

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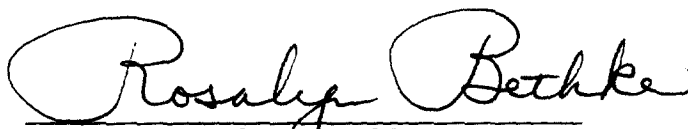
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CTIA

Service Description for
Calling Party Pays (CPP)

December, 1997

(Draft Revision 0.3)

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1.0 Introduction

This document presents the high level function requirements for a wireless Calling Party Pays (CPP) service. Calls to subscribers to this service will be charged to the *calling* party, rather than the *called* mobile. In cases when it is not possible to charge the calling party, an alternate action will be taken (e.g. denying the call or charging the called party).

1.1 Purpose

The purpose of this document is to describe the functional requirements for a wireless CPP service, and to illustrate the basic network information flows required to implement such a service. This service is provided by wireless carriers and is implemented through cooperative arrangements with other entities.

1.2 Scope

This document is limited in scope to defining the functional requirements necessary for seamless operation of a CPP service. It avoids requirements that would unnecessarily prevent carriers from customizing the service or methods for billing or charging for the service.

1.3 Glossary

Term	Definition
AMPS	Advanced Mobile Phone Service. A cellular technology originating in the US, and standardized by the TIA.
ANI	Automatic Number Identification (i.e. billing number).
ANI II	ANI Information Digits. 2 digits that identify the type of calling number. Examples (from Bellcore TA-NPL-000145) are: 00 Regular Line 06 Hotel/motel 27 Coin 61,62,63 Cellular 70 Private Pay Stations Also see OLI.
BNA	Billing Name and Address
CAC	Carrier Access Code (10XXX or 101XXXX).
CIBER	Cellular Inter-carrier Billing Exchange Record. A wireless billing record format.
CIC	Carrier Identification Code. The "XXX" or "XXXX" of a CAC.
CPN	Calling Party Number
CPP	Calling Party Pays
CPPBI	CPP Billing Indicator. Information element from originating carrier that defines whether the calling party can place CPP calls.

Forward CPP Parameters (FCP)	<p>A collection of information elements sent from the originating carrier to the home wireless carrier to facilitate CPP, including;</p> <ul style="list-style-type: none"> • Originating Carrier Identity • Originating Line Information (OLI) • CPP Billing Indicator (CPPBI)
GSM	Global System for Mobile Communications. A cellular technology originating in Europe and standardized by ETSI in Europe and ATIS T1P1 in the US.
HLR	Home Location Register.
Home Wireless Carrier	The carrier responsible for a wireless subscriber
IC	Inter-Exchange Carrier (see IXC, IEC)
IEC	Inter-Exchange Carrier (see IC, IXC)
IMSI	International Mobile Station Identity (see ITU-T E.212). A variable length (up to 15 digits) mobile identifier, including country code.
IP	Intelligent Peripheral. An external device containing special resources, such as announcements, tones, speech recognition equipment, etc.
IXC	Inter-Exchange Carrier (see IC, IEC)
JIP	Jurisdictional Information Parameter (ISUP)
Leakage	The inability to bill the party responsible for call charges.
LEC	Local Exchange Carrier
LIDB	Line Information database
LNP	Local Number Portability
LRN	Location Routing Number. A number used for routing to ported directory numbers.
MAP	Mobile Application Part. An application protocol used for communication between wireless network elements.
MDN	Mobile Directory Number.
MIN	Mobile Identification Number. A fixed length 10 digit mobile identifier.
MSC	Mobile Switching Center (aka MTSO). A wireless switch.
MSCID	Wireless network element address (combination of SID and a switch number).
MSID	Mobile Station Identifier (MIN or IMSI).
NANP	North American Numbering Plan (US, Canada and some of the Caribbean).
NP	Number Pooling
NPA	Numbering Plan Area
NPDB	Number Portability Database.
NXX	The 4th through 6th digits of an NANP 10 digit directory number.
OLI	Originating Line Indicator (ISUP parameter). Similar in function to the ANI II information digits.

PBX, PABX	Private Branch Exchange.
Roamer Access Number (Roamer Port)	A phone number that can be used to terminate calls to a roamer via a direct call to the serving system.
SAC	Service Access Code (e.g. 1-800, 1-900).
SCP	Service Control Point. An external device containing service logic.
SID	System Identification. An identifier of a wireless license, broadcast by base stations using the AMPS/IS-41 family of standards.
SN	Service Node. A combined SCP and IP.

1.4 References

- *IS-93 Revision 0: Cellular Radio Telecommunications Ai-Di Interfaces Standard*, TIA, December 1993.
- *Notice of Inquiry, Calling Party Pays Service Option in the Commercial Mobile Radio Services (FCC 97-341, WT Docket No. 97-207)*, FCC, October 1997.
- *TA-NPL-000145, Compatibility Information for Interconnection of a Wireless Service Provider and Local Exchange Carrier Network*, Bellcore, August 1993.
- *The Who, What and Why of "Calling Party Pays"*, CTIA, June 1997.
- *Workbook for CTIA Forum on Calling Party Pays*, CTIA, September 1997.

2.0 Requirements

2.1: Responsibility For CPP Interception

Responsibility for the identification and control of the CPP service lies with the home wireless carrier.

2.2: Geographical Scope

All CPP services are limited to a specific calling scope. US and Canadian systems have often restricted the scope to a local calling area. Some CPP systems in other countries have achieved a national scope.

The long term service goal is to evolve from the current local or regional scope of services to an NANP scope. CPP charges for calls made from outside the geographical scope of the service will be treated as leakage.

2.3: Notification to the caller of CPP charges

Callers to CPP subscribers may need to be notified that they will be billed additional charges. If notification to the caller is required, it will be provided by an industry standard audible tone, optionally (based upon regulatory and customer requirements) followed by a recorded message or an interactive dialog.

If an interactive dialog is implemented, charges may be incurred even if the call is not completed, due to the need to provide answer supervision.

The use of notification that is implicit in the dialed number (e.g. dedicated NXX) is not supported due to the advent of number portability and pooling.

2.4: Interactive Voice Response Units

In the event that a CPP call is routed to an Interactive Voice Response (IVR) system, the following optional scenarios may be involved:

- i. an alternate billing mechanism, such as a credit or calling card, could be provided to the originating party. This option may be particularly useful if the originating station has been identified as a non-CPP compliant device (i.e.- payphone)
- ii. an option to bypass the CPP feature - pre-empting the normal CPP billing mechanism
- iii. an option to pre-empt the CPP announcement and then be routed to the CPP subscriber immediately

It should be emphasized that there are a number of residual billing issues pertaining to the generation of any access charges which may be involved due to the requirement to provide answer supervision to the originating switch.

2.5: CPP Subscriber Directory Numbers

There should be no limitations on which directory numbers can be assigned to CPP subscribers. Wireless subscribers should be able to initiate or terminate a CPP subscription without changing their directory number.

2.6: Recognizing Leakage

Leakage occurs when CPP calls cannot be fully billed. This often occurs from payphones and from PBX systems supporting hotel, motel, prison, dormitory and campus environment phones, and from phones connected to systems that may not have a CPP billing arrangement with the home wireless carrier (e.g. competing wireless carriers, competitive LECs, international carriers and independent carriers in distant markets). Some leakage also occurs when calls are made that bypass the home wireless carrier that is providing CPP services (e.g. roamer access number calls).

Originating entities must make information available in a standardized format (along with other call information) to enable the home wireless carrier to determine if the call can be billed.

2.7: Treatment of Leakage

The long-term goal is the elimination of leakage. However, in the interim, leakage must be recognized and handled. Carriers should be provided with at least the following alternatives for actions that can occur after potential leakage is recognized:

- Block call.
- Alternate bill (e.g. credit card billing, third number billing, reverse charging).
- Bill to CPP subscriber.

2.8: Flexibility in Charging

CPP calls can be charged at a fixed rate, or one that varies depending on time of day, terminating carrier, subscriber's rate plan or the location of the subscriber.

2.9: Roaming Charges

Roaming mobiles often incur additional charges, such as higher than normal airtime rates, daily access fees and long distance charges for the call leg from the home system to the visited system. The calling party's rate will not be affected if the CPP subscriber is roaming. All incremental roaming-related charges may be allocated to the CPP subscriber.

2.10: Recording

Responsibility for CPP call detail recording lies with the home wireless switch (MSC).

2.11: Interactions with Number Portability and Number Pooling

There are interactions between CPP and local number portability. Local Number Portability is a regulatory requirement that allows subscribers to various types of phone service to retain their directory number when changing to a different service provider in the same local area.

There are also interactions between CPP and number pooling. In an attempt to forestall exhaust of the NANP and to make numbers from existing but exhausting NPAs available to new entrants, number pooling has been proposed in many venues. Number pooling would permit more than one carrier to utilize telephone numbers within a single NXX. While the level at which numbers will be pooled (1000s, 100s, individual line level) has not been determined, number pooling in some form will almost certainly occur at or shortly after deployment of LNP. LNP functionality is required to overcome many technical concerns associated with number pooling. Because NP is dependent upon LNP capabilities, wireless carriers will likely be exempted from NP until they are capable of performing LNP functionality on their own behalf. Relief from LNP responsibilities is meaningless if NP is ordered since LNP capability would have to be implemented in order to achieve NP. Impacts of NP on CPP are similar to the impacts of LNP on CPP. In fact, NP may well occur in more locations at a faster pace than LNP.

It was recognized that CPP must co-exist with LNP and number pooling as the service architecture is developed. It appears that the LNP query must be the last query applied to a CPP call. It is strongly recommended that wireless carriers be permitted to continue to receive entire NXX blocks to preserve existing CPP implementations as long as possible. Further, CMRS NXXs should not be subject to harvesting in order to prevent the premature invalidation of current NXX-based services.

2.12: Interactions with Other Carriers

New wireless carriers, local exchange competition and resale will increase the number of entities from which CPP calls can be originated. In order for CPP to effectively function in a competitive/resale environment, it will be necessary for all telecommunications carriers to share requisite information to achieve identification and accurate billing of CPP calls. This may require modifications to signaling protocols and call detail record exchange formats.

2.13: Settlement Auditability

In the exchange of call detail and billing information, consideration should be given to the ability to reconcile the records that were submitted for billing with the revenue received.

2.14: Originating Blocking

A uniform methodology for providing blocking should be available to carriers electing to utilize originating call blocking. The originating carrier is responsible for providing the indication to the home wireless system.

2.15: Billing

The ultimate success of CPP depends upon the ability to accurately bill callers from all originating networks which would necessarily include LECs, wireless carriers, IXC's, etc. Such billing should be as flexible as possible. It is necessary to develop standards for the exchange of information necessary for caller billing to be achieved, including that used to determine applicable taxes.

2.16 Originating Carrier ID

There are several possible ways to identify the originating carrier for billing purposes:

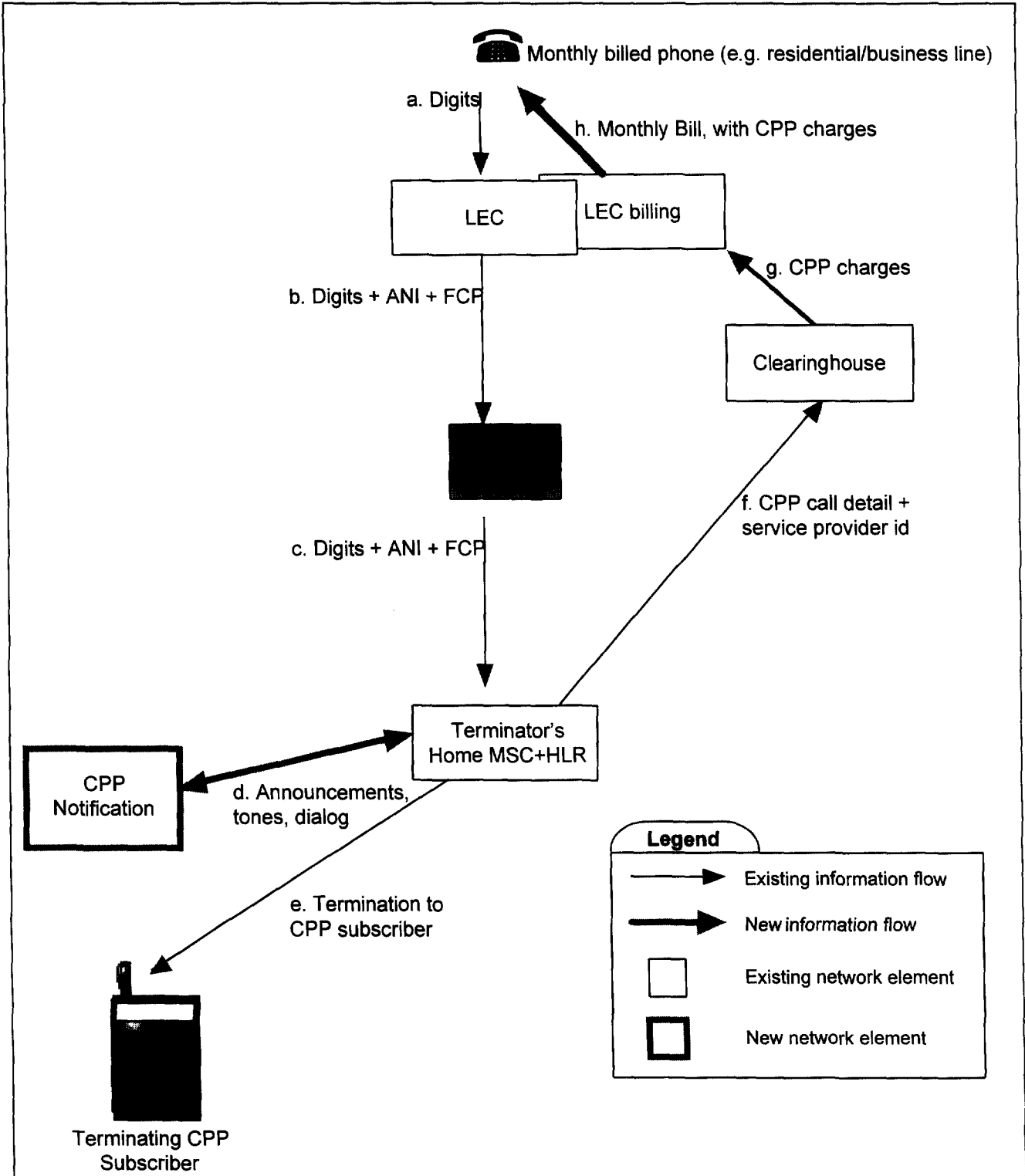
- i. MSID (MIN or IMSI, applicable only to other wireless carriers).
- ii. CIC - Carrier Identification Code.
4 digit number. Administered by NANP. It may not be acceptable to use this for non-routing purposes.
- iii. CC - Company Code.
4 digit number (10,000 codes), possibly migrating to 2 digit + 2 alphanumeric format (129,600 codes). Administered by NECA.
- iv. OCN - Operating Company Number.
4 alphanumeric digit format (1,679,616 codes). Administered by Bellcore.

2.17 Call Detail/Billing Record Exchange

Methods must be defined for standardized record exchange from Wireless Carriers to other Carriers. Also, modifications to switch call detail records, wireline EMR and EMI formats and wireless CIBER and IS-124 formats may be required to support CPP. Call detail and billing records should contain an indication that the call was CPP.

3.0 Information Flows

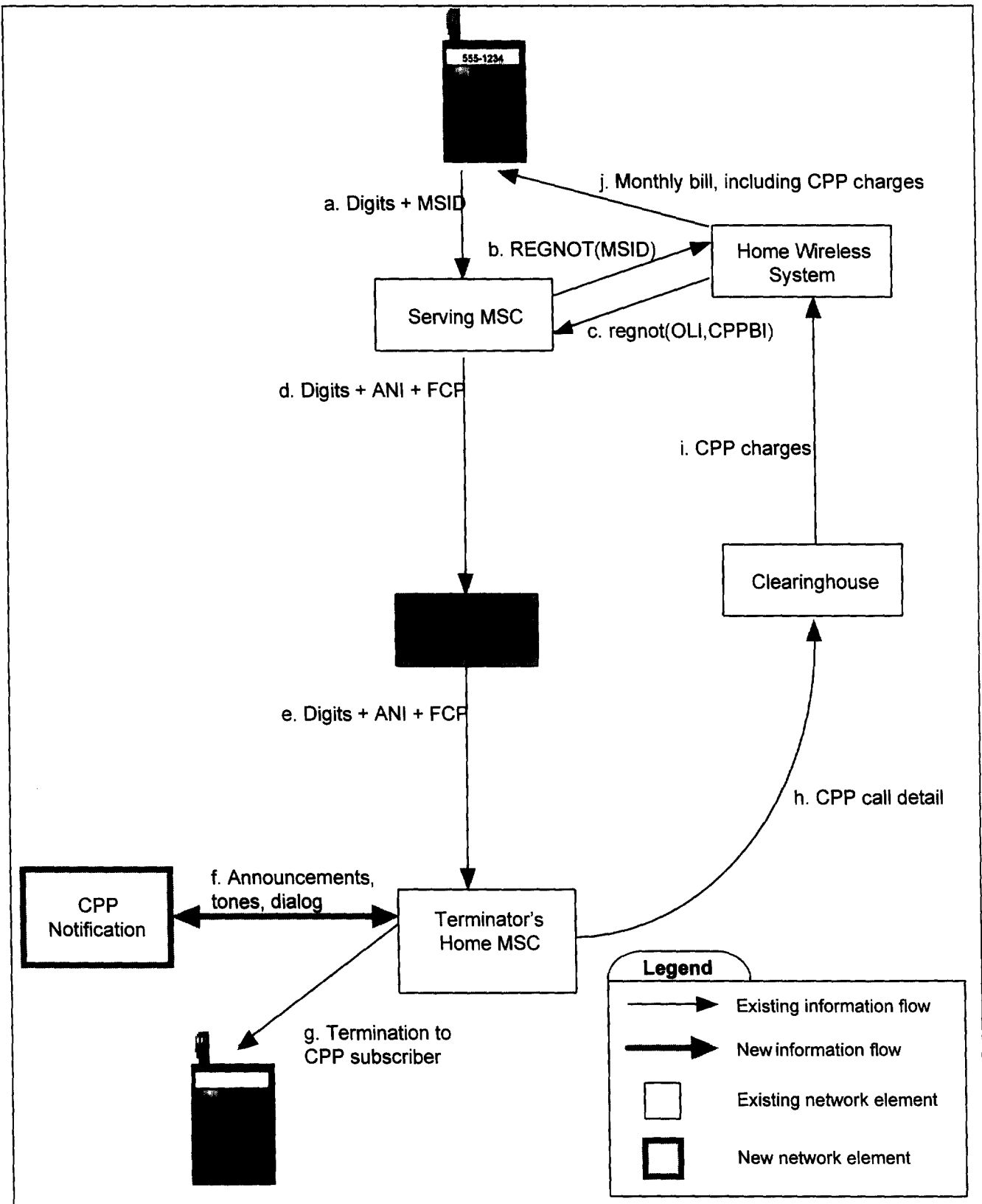
3.1 Call From Monthly Billed Line



Calls from residential and business lines are generally billed on a monthly basis. Consequently, charges can be sent back to the responsible billing entity many days after the call is made, and will be presented on the monthly bill. The responsible billing entity will likely require the ability to accurately determine which individual caller made each CPP call. Large businesses, PBX and Centrex-served entities may demand this capability. This scenario does not consider calls from wireless carriers, which may also bill on a monthly basis.

- a. The phone number of a wireless CPP subscriber is "dialed" from a monthly billed telephone (e.g. residential or business line). Note that a TouchTone™ phone may be required for CPP services that involve an interactive dialog.
- b. The serving switch (e.g. LEC) routes the call based on dialed digits, a possible number portability query, and other information. Note that the call has not been recognized as CPP at this point. The dialed digits, ANI and forward CPP parameters (FCP) are forwarded to the next switch, which may be an inter-exchange carrier.
- c. If an inter-exchange carrier is involved in the call, it will need to pass through the dialed digits, ANI and FCP unchanged.
- d. The wireless system notifies the user in the appropriate way (e.g. by tones, announcements or by an interactive dialog). This notification can be internal to the MSC/HLR or (as shown in the diagram) in an external device (e.g. SCP, SN).
- e. If the caller accepts the CPP charges, the call can be terminated to the CPP subscriber. Note that it is assumed that, if the CPP subscriber is roaming, the terminating party implicitly accepts all incremental roaming charges (including roaming airtime and daily roaming charges).
- f. After the call is disconnected, call detail information is forwarded to a clearinghouse (possibly through some intermediate steps). This step may occur several days later.
- g. The clearinghouse forwards the rated call information to the originating carrier's billing system.
- h. The originating carrier adds the CPP charges to the monthly bill for the caller.

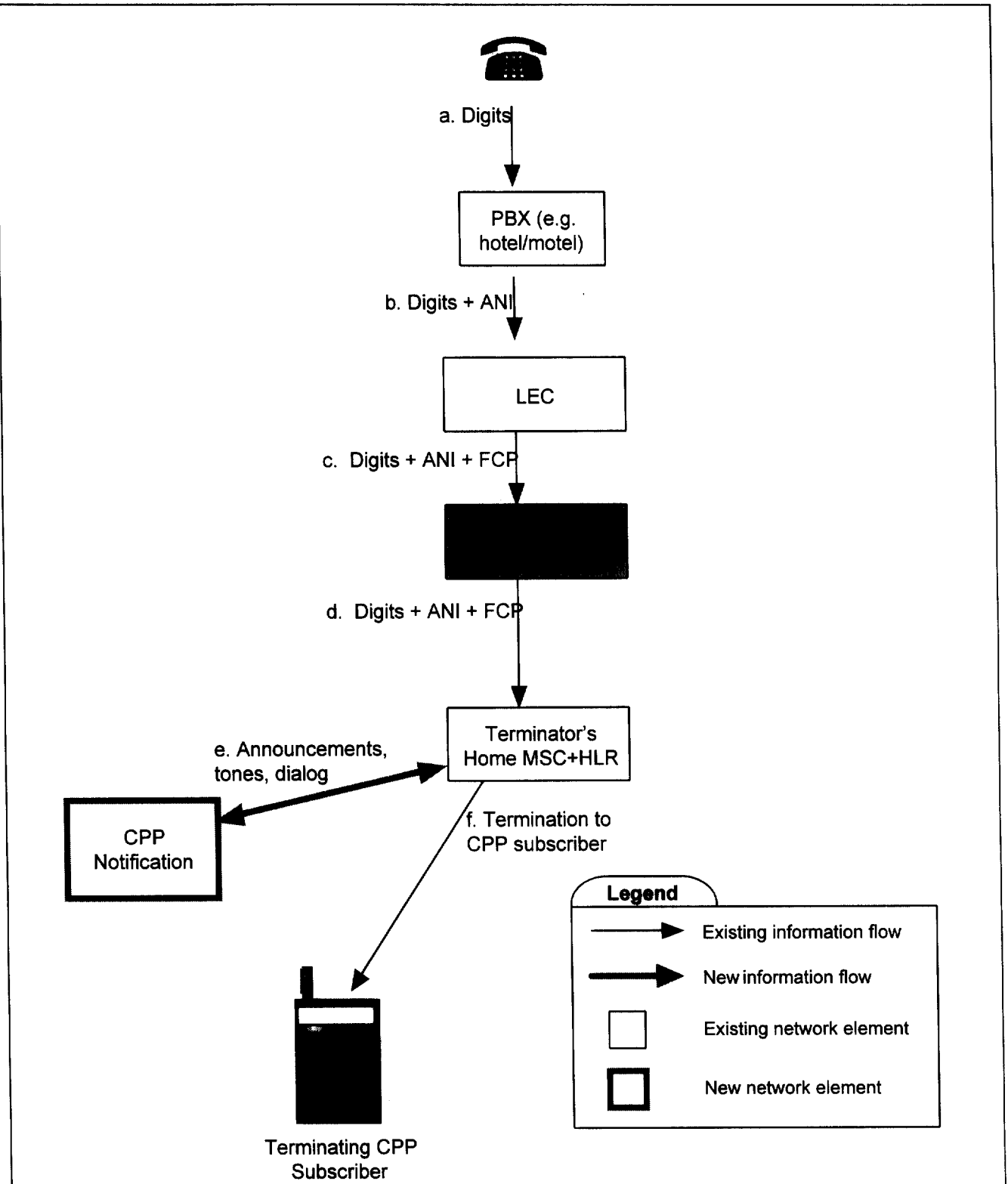
3.2 Call from Wireless Carrier



This scenario considers calls from wireless phones that are billed on a monthly basis (although a significant number of prepaid ("debit") phones are in use - these are considered under the "Prepay" scenario). Charges can be sent back to the responsible billing entity many days after the call is made, and will be presented on the monthly bill.

- a. The phone number of a wireless CPP subscriber is "dialed" from a monthly billed wireless phone.
- b. The serving MSC initiates a REGNOT (TIA/EIA-41 RegistrationNotification INVOKE) to the originating mobile's HLR. This is an existing operation, and may also occur prior to step a.
- c. The HLR responds with a regnot (RegistrationNotification RETURN RESULT) to the serving MSC. This message contains standard validation and profile information, as well as the new Forward CPP Parameters (FCP).
- d. The serving MSC routes the call based on dialed digits, a possible number portability query, and other information. Note that the call has not been recognized as CPP at this point. The dialed digits, ANI and FCP are forwarded to the next switch, which may be an inter-exchange carrier.
- e. If an inter-exchange carrier is involved in the call, it will need to pass the received parameters on unchanged.
- f. The wireless system notifies the user in the appropriate way (e.g. by tones, announcements or by an interactive dialog). This notification can be internal to the MSC/HLR or (as shown in the diagram) in an external device.
- g. If the wireless caller accepts the CPP charges, the call can be terminated to the CPP subscriber. Note that it is assumed that, if the CPP subscriber is roaming, the terminating party (CPP subscriber) implicitly accepts all incremental roaming charges (including roaming airtime and daily roaming charges).
- h. After the call is disconnected, call detail information is forwarded to a clearinghouse (possibly through some intermediate steps). This step may occur several days later.
- i. The clearinghouse forwards the rated call information to the originating caller's home carrier's billing system. This may be through CIBER or IS-124 information transfers or a proprietary method.
- j. The home carrier adds the CPP charges to the monthly bill for the wireless caller.

3.3 Call from Hotel/Motel Phones



This scenario considers calls from phones that must be billed more frequently than monthly. For example, hotel/motel phone calls should be billed within hours (or less) of a call being made. This raises a billing problem, because there is currently no path to carry this billing information. Practical alternatives are to deny such calls or provide alternate billing arrangements (such as credit card).

- a. The phone number of a wireless CPP subscriber is "dialed" from a hotel/motel (or similarly billed) phone.
- b. The originating PBX routes the call, based on dialed digits to a local exchange carrier.
- c. The local exchange routes the call based on dialed digits, a possible number portability query, and other information. Note that the call has not been recognized as CPP at this point. The dialed digits, ANI and FCP are forwarded to the next switch, which may be an inter-exchange carrier.
- d. If an inter-exchange carrier is involved in the call, it will need to pass the received parameters on unchanged.
- e. Because of information in the FCP, the wireless system notifies the caller that the call cannot proceed without alternate billing arrangements (e.g. a credit card). If appropriate billing information is not provided, the call is blocked. Automatic billing cannot be provided, because the wireless carrier has no way to influence the hotel/motel PBX or access the hotel/motel billing system.
- f. If the caller provides appropriate billing information, the call can be terminated to the CPP subscriber. It is assumed that, if the CPP subscriber is roaming, the terminating party implicitly accepts all incremental roaming charges (including roaming airtime and daily roaming charges).

Note that, because alternate billing arrangements were made, the call detail record will not result in the creation of a billing record, and thus is not shown on this scenario.